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FOLEY HOAG, LLP PATENT GROUP, WORLD TRADE CENTER WEST 155 SEAPORT BLVD BOSTON, MA 02110			WASSUM, LUKE S	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/624,918	TOONG ET AL.	
	Examiner	Art Unit	
	Luke S. Wassum	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 27 February 2007.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-40 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-40 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 27 February 2007 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 27 February 2007 has been entered.

Response to Preliminary Amendments

2. The Applicants' preliminary amendment, filed 27 February 2007, has been received. A supplemental preliminary amendment, filed 13 April 2007, has also been received.

These amendments have been entered into the record and considered.

3. As a result of the amendments, claims 1, 11 and 24 have been amended, and new claims 29-40 have been added. Claims 1-40 are now presented for examination.

Priority

4. The examiner acknowledges the Applicants' claim to domestic priority under 35 U.S.C. § 119(e) to provisional U.S. Patent Application 60/397,542, filed 22 July 2002.

5. The examiner notes, however, that the provisional application is substantially more limited in its teaching than the instant application. At the least, the provisional application fails to disclose any aspect of analysis involving non-patent publications, association of times with data elements, and also fails to disclose any graphical display of the analysis results.

As a result, *at least* claims 4-10, 12, 13 and 15-17 are not entitled to the priority date of the provisional application, since the limitations claimed are not supported by the disclosure of the cited provisional application.

The Invention

6. The claimed invention is a system for searching databases to identify a set of data elements referenced by a starting data element, and identifying a second set of data elements that are referenced by data elements in the first set.

Drawings

7. The amended drawing figures 2-4 have been received and considered. The amended drawings are approved.

Priority

8. The examiner acknowledges the Applicants' claim to domestic priority under 35 U.S.C. § 119(e) to provisional U.S. Patent Application 60/397,542, filed 22 July 2002.

9. The examiner notes, however, that the provisional application is substantially more limited in its teaching than the instant application. At the least, the provisional application fails to disclose any aspect of analysis involving non-patent publications, association of times with data elements, and also fails to disclose any graphical display of the analysis results.

As a result, *at least* claims 4-7, 8-10, 12, 13 and 15-17 are not entitled to the priority date of the provisional application, since the limitations claimed are not supported by the disclosure of the cited provisional application.

The Invention

10. The claimed invention is a system for searching databases to identify a set of data elements referenced by a starting data element, and identifying a second set of data elements that are referenced by data elements in the first set.

Specification

11. The Applicants' amendment to the specification, filed 13 April 2007, has been received.

12. Since the Applicants' claim to domestic priority detailed in the amended paragraph [0001] has not been timely filed (detailed in the Response to Arguments, below), the proposed amendment to the specification will not be entered.

Claim Rejections - 35 USC § 101

13. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

14. Claims 1-6, 11-13 and 17-40 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

15. Regarding claims 1, 11 and 24, these claims recite the process of identifying data elements and relationships therebetween, but fails to recite a tangible result, a requirement for compliance with the provisions of 35 U.S.C. § 101 for a process that can be interpreted as being implemented through software.

For a result to be tangible, it must be more than just a thought or a computation; it must have real-world value rather than an abstract result. See *GOTTSCHALK, Comr. Pats. v. BENSON et al.* (US SupCt) 175 USPQ 673 at 676-77 (invention ineligible because it had "no substantial practical application"). For instance, note that the limitations of claims 7-10 and 14-16 are not rejected, since they recite the function of displaying the data resulting from the operation to a user, whereas (for instance), claim 1 merely cites 'generating data' as the result.

16. Claims 2-6, 12, 13, 17-23 and 25-40, fully incorporating the deficiencies of their respective independent claims, are likewise rejected.

Claim Rejections - 35 USC § 102

17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

18. Claims 1-9, 11-16 and 18-40 are rejected under 35 U.S.C. 102(b) as being anticipated by **Rivette et al.** (U.S. Patent 6,339,767).

19. Regarding claim 1, **Rivette et al.** teaches a method of searching a database of data elements as claimed, the method comprising:

a) based on a starting data element, identifying a first set of one or more data elements in the database, the data elements of the first set being referenced by the starting data element (see disclosure of the PatentRef table storing information on U.S. Patents cited during the prosecution of a given patent, col. 60, line 59 through col. 61, line 6; see also element 4028 in drawing Figure 40; see also detailed description of the Patent Citation Module, col. 87, line 4 through col. 89, line 53, which operates to identify, for a particular patent [called a source patent], the patents which were cited during

prosecution of the selected patent [backwards citation report], col. 87, lines 4-10, as well as identifying for a source patent those patents in which the source patent was cited [forward citation report], col. 87, lines 11-15; see also drawing Figures 86 and 87);

b) based on the first set, identifying a second set of one or more data elements in the database, the data elements of the second set referencing one or more of the data elements of the first set (see disclosure of the PatentRef table storing information on U.S. Patents cited during the prosecution of a given patent, col. 60, line 59 through col. 61, line 6; see also element 4028 in drawing Figure 40; see also detailed description of the Patent Citation Module, col. 87, line 4 through col. 89, line 53, which operates to identify, for a particular patent [called a source patent], the patents which were cited during prosecution of the selected patent [backwards citation report], col. 87, lines 4-10, as well as identifying for a source patent those patents in which the source patent was cited [forward citation report], col. 87, lines 11-15; see also drawing Figures 86 and 87);

c) generating data based on the data elements of the first and second sets and the relationships therebetween (see disclosure of the PatentRef table storing information on U.S. Patents cited during the prosecution of a given patent,

col. 60, line 59 through col. 61, line 6; see also element 4028 in drawing

Figure 40; see also detailed description of the Patent Citation Module, col. 87, line 4 through col. 89, line 53, which operates to identify, for a particular patent [called a source patent], the patents which were cited during prosecution of the selected patent [backwards citation report], col. 87, lines 4-10, as well as identifying for a source patent those patents in which the source patent was cited [forward citation report], col. 87, lines 11-15; see also drawing Figures 86 and 87); and

- d) the second set being identified by recursive searching, without user intervention, in which any successive search is capable of being contracted, expanded and/or otherwise modified to include one or more generations of interrelated data elements (see disclosure that the patent citation report can be performed and displayed in a recursive fashion with an operator specified depth, col. 88, line 65 through col. 89, line 21).

20. Regarding claim 11, Rivette et al. teaches a method of searching a database to identify prior art publications for a starting patent publication as claimed, the method comprising:

- a) based on the starting patent publication, identifying a first set of one or more publications in the database, the publications of the first set being cited by the starting patent publication (see disclosure of the PatentRef table storing information on U.S. Patents cited during the prosecution of a given patent, col. 60, line 59 through col. 61, line 6; see also element 4028 in drawing Figure 40; see also detailed description of the Patent Citation Module, col. 87, line 4 through col. 89, line 53, which operates to identify, for a particular patent [called a source patent], the patents which were cited during prosecution of the selected patent [backwards citation report], col. 87, lines 4-10; see also drawing Figure 86);
- b) based on the first set, identifying a second set of one or more publications in the database, the publications of the second set citing one or more of the publications of the first set (see disclosure of the PatentRef table storing information on U.S. Patents cited during the prosecution of a given patent, col. 60, line 59 through col. 61, line 6; see also element 4028 in drawing Figure 40; see also detailed description of the Patent Citation Module, col. 87, line 4 through col. 89, line 53, which operates to identify, for a particular patent [called a source patent], the patents in which the source patent was

cited [forward citation report], col. 87, lines 11-15; see also drawing Figure 87);

c) generating data based on the publications of the first and second sets and the citation relationships therebetween (see disclosure of the PatentRef table storing information on U.S. Patents cited during the prosecution of a given patent, col. 60, line 59 through col. 61, line 6; see also element 4028 in drawing Figure 40; see also detailed description of the Patent Citation Module, col. 87, line 4 through col. 89, line 53, which operates to identify, for a particular patent [called a source patent], the patents which were cited during prosecution of the selected patent [backwards citation report], col. 87, lines 4-10, as well as identifying for a source patent those patents in which the source patent was cited [forward citation report], col. 87, lines 11-15; see also drawing Figures 86 and 87); and

d) the second set being identified by recursive searching, without user intervention, in which any successive search is capable of being contracted, expanded and/or otherwise modified to include one or more generations of interrelated data elements (see disclosure that the patent citation report can be performed and displayed in a recursive fashion with an operator specified depth, col. 88, line 65 through col. 89, line 21).

21. Regarding claim 24, Rivette et al. teaches a processor program for searching a database to identify prior art publications for a starting patent publication as claimed, the processor program being stored on a processor readable medium and comprising instructions to cause the processor to:

- a) based on the starting patent publication, identify a first set of one or more publications in the database, the publications of the first set being cited by the starting publication (see disclosure of the PatentRef table storing information on U.S. Patents cited during the prosecution of a given patent, col. 60, line 59 through col. 61, line 6; see also element 4028 in drawing Figure 40; see also detailed description of the Patent Citation Module, col. 87, line 4 through col. 89, line 53, which operates to identify, for a particular patent [called a source patent], the patents which were cited during prosecution of the selected patent [backwards citation report], col. 87, lines 4-10; see also drawing Figure 86);
- b) based on the first set, identify a second set of one or more publications in the database, the publications of the second set citing one or more of the

publications of the first set (see disclosure of the PatentRef table storing information on U.S. Patents cited during the prosecution of a given patent, col. 60, line 59 through col. 61, line 6; see also element 4028 in drawing Figure 40; see also detailed description of the Patent Citation Module, col. 87, line 4 through col. 89, line 53, which operates to identify, for a particular patent [called a source patent], the patents in which the source patent was cited [forward citation report], col. 87, lines 11-15; see also drawing Figure 87);

c) generate data based on the publications of the first and second sets and the relationship therebetween (see disclosure of the PatentRef table storing information on U.S. Patents cited during the prosecution of a given patent, col. 60, line 59 through col. 61, line 6; see also element 4028 in drawing Figure 40; see also detailed description of the Patent Citation Module, col. 87, line 4 through col. 89, line 53, which operates to identify, for a particular patent [called a source patent], the patents which were cited during prosecution of the selected patent [backwards citation report], col. 87, lines 4-10, as well as identifying for a source patent those patents in which the source patent was cited [forward citation report], col. 87, lines 11-15; see also drawing Figures 86 and 87); and

d) wherein said instructions are further capable of causing the processor to identify the second set by recursive searching, without user intervention, in which any successive search is capable of being contracted, expanded and/or otherwise modified to include one or more generations of interrelated data elements (see disclosure that the patent citation report can be performed and displayed in a recursive fashion with an operator specified depth, col. 88, line 65 through col. 89, line 21).

22. Regarding claim 2, Rivette et al. additionally teaches a method wherein identifying a first set of one or more data elements includes determining whether the starting data element includes one or more references to one or more other data elements and identifying a first set of one or more data elements based on the references (see disclosure of the PatentRef table storing information on U.S. Patents cited during the prosecution of a given patent, col. 60, line 59 through col. 61, line 6; see also element 4028 in drawing Figure 40; see also detailed description of the Patent Citation Module, col. 87, line 4 through col. 89, line 53, which operates to identify, for a particular patent [called a source patent], the patents which were cited during prosecution of the selected patent [backwards citation report], col. 87, lines 4-10; see also drawing Figure 86).

23. Regarding claim 3, **Rivette et al.** additionally teaches a method wherein identifying a second set of one or more data elements includes determining whether one or more data elements in the database include one or more references to one or more of the data elements of the first set and identifying a second set of one or more data elements based on the references (see disclosure of the PatentRef table storing information on U.S. Patents cited during the prosecution of a given patent, col. 60, line 59 through col. 61, line 6; see also element 4028 in drawing Figure 40; see also detailed description of the Patent Citation Module, col. 87, line 4 through col. 89, line 53, which operates to identify, for a particular patent [called a source patent], the patents in which the source patent was cited [forward citation report], col. 87, lines 11-15; see also drawing Figure 87).

24. Regarding claim 4, **Rivette et al.** additionally teaches a method wherein the starting data element is associated with a starting time and wherein identifying a first set of one or more data elements includes identifying data elements referenced by the starting data element and associated with first times earlier than the starting time (see disclosure of the PatentRef table storing information on U.S. Patents cited during the prosecution of a given patent, col. 60, line 59 through col. 61, line 6; see also element

4028 in drawing Figure 40; see also detailed description of the Patent Citation Module, col. 87, line 4 through col. 89, line 53, which operates to identify, for a particular patent [called a source patent], the patents which were cited during prosecution of the selected patent [backwards citation report], col. 87, lines 4-10; see also drawing Figure 86; see also disclosure that filing date is included in the Patent Bibliographic Database, col. 18, lines 55-66; see also disclosure of extensive search and retrieval functionality and its relation to patent groups, col. 26 line 38 through col. 31, line 63).

25. Regarding claim 5, **Rivette et al.** additionally teaches a method wherein identifying the second set of one or more data elements includes identifying data elements that reference the data elements of the first set and that are associated with second times later than the first times (see disclosure of the PatentRef table storing information on U.S. Patents cited during the prosecution of a given patent, col. 60, line 59 through col. 61, line 6; see also element 4028 in drawing Figure 40; see also detailed description of the Patent Citation Module, col. 87, line 4 through col. 89, line 53, which operates to identify, for a particular patent [called a source patent], the patents in which the source patent was cited [forward citation report], col. 87, lines 11-15; see also drawing Figure 87; see also disclosure that filing date is included in the Patent Bibliographic Database, col. 18, lines 55-66; see also disclosure of extensive search and

retrieval functionality and its relation to patent groups, col. 26 line 38 through col. 31, line 63).

26. Regarding claim 6, **Rivette et al.** additionally teaches a method wherein identifying the second set of one or more data elements includes identifying data elements that reference the data elements of the first set and that are associated with second times later than the first times and earlier than the starting time (see disclosure of the PatentRef table storing information on U.S. Patents cited during the prosecution of a given patent, col. 60, line 59 through col. 61, line 6; see also element 4028 in drawing Figure 40; see also detailed description of the Patent Citation Module, col. 87, line 4 through col. 89, line 53, which operates to identify, for a particular patent [called a source patent], the patents in which the source patent was cited [forward citation report], col. 87, lines 11-15; see also drawing Figure 87; see also disclosure that filing date is included in the Patent Bibliographic Database, col. 18, lines 55-66; see also disclosure of extensive search and retrieval functionality and its relation to patent groups, col. 26 line 38 through col. 31, line 63).

27. Regarding claims 7 and 14, **Rivette et al.** additionally teaches a method further comprising providing the generated data to one or more of a user and a display (see drawing Figures 157-164).

28. Regarding claims 8 and 15, **Rivette et al.** additionally teaches a method further comprising graphically displaying data elements of the first and second sets and the relationships therebetween (see drawing Figure 164).

29. Regarding claims 9 and 16, **Rivette et al.** additionally teaches a method wherein the publications are represented by geometric shapes and wherein the relationships are represented by lines between geometric shapes (see drawing Figure 164).

30. Regarding claims 12 and 13, **Rivette et al.** additionally teaches a method wherein the publications include one or more of patent publications and non-patent publications and wherein the patent publications include one or more of issued patents, published patent applications and non-published patent applications (see disclosure of the PatentRef table storing information on U.S. Patents cited during the prosecution of a given patent, col. 60, line 59 through col. 61, line 6; see also element 4028 in drawing Figure 40).

31. Regarding claim 18, **Rivette et al.** additionally teaches a method further comprising based on the second set, identifying one or more candidate patent publications for one or more of invalidating prior art for the starting patent publication, licensing opportunities and seminal prior art (see disclosure of the PatentRef table storing information on U.S. Patents cited during the prosecution of a given patent, col. 60, line 59 through col. 61, line 6; see also element 4028 in drawing Figure 40; see also detailed description of the Patent Citation Module, col. 87, line 4 through col. 89, line 53, which operates to identify, for a particular patent [called a source patent], the patents in which the source patent was cited [forward citation report], col. 87, lines 11-15; see also drawing Figure 87; see also disclosure that filing date is included in the Patent Bibliographic Database, col. 18, lines 55-66; see also disclosure of extensive search and retrieval functionality and its relation to patent groups, col. 26 line 38 through col. 31, line 63; see also disclosure of the use of patent citation analysis in competitive analysis and strategic planning, col. 103, line 24 through col. 108, line 14).

32. Regarding claims 19 and 25, **Rivette et al.** additionally teaches a method and processor program wherein identifying one or more candidate patent publications for invalidating prior art includes identifying one or more patent publications in the second

set that do not cite the starting patent publication that are not cited by the starting patent publication and that are associated with filing dates earlier than the starting patent publication (see disclosure of the PatentRef table storing information on U.S. Patents cited during the prosecution of a given patent, col. 60, line 59 through col. 61, line 6; see also element 4028 in drawing Figure 40; see also detailed description of the Patent Citation Module, col. 87, line 4 through col. 89, line 53, which operates to identify, for a particular patent [called a source patent], the patents in which the source patent was cited [forward citation report], col. 87, lines 11-15; see also drawing Figure 87; see also disclosure that filing date is included in the Patent Bibliographic Database, col. 18, lines 55-66; see also disclosure of extensive search and retrieval functionality and its relation to patent groups, col. 26 line 38 through col. 31, line 63; see also disclosure of the use of patent citation analysis in competitive analysis and strategic planning, col. 103, line 24 through col. 108, line 14).

33. Regarding claims 20 and 26, **Rivette et al.** additionally teaches a method and processor program wherein identifying one or more candidate patent publications for licensing opportunities includes identifying one or more patent publications that are associated with a first assignee and that are cited by one or more patent publications associated with one or more different second assignees (see disclosure of the PatentRef

table storing information on U.S. Patents cited during the prosecution of a given patent, col. 60, line 59 through col. 61, line 6; see also element 4028 in drawing Figure 40; see also detailed description of the Patent Citation Module, col. 87, line 4 through col. 89, line 53, which operates to identify, for a particular patent [called a source patent], the patents in which the source patent was cited [forward citation report], col. 87, lines 11-15; see also drawing Figure 87; see also disclosure that filing date is included in the Patent Bibliographic Database, col. 18, lines 55-66; see also disclosure of extensive search and retrieval functionality and its relation to patent groups, col. 26 line 38 through col. 31, line 63; see also disclosure of the use of patent citation analysis in competitive analysis and strategic planning, col. 103, line 24 through col. 108, line 14, and specifically the disclosure of identification of potential licensees at col. 103, lines 37-58).

34. Regarding claims 21 and 27, Rivette et al. additionally teaches a method and processor program wherein identifying one or more candidate patent publications for seminal prior art includes identifying one or more patent publications that cite a first number of patent publications that cite a first number of patent publications and that are cited by a second number of patent publications, wherein the second number is greater than the first number (see disclosure of the PatentRef table storing information on U.S. Patents cited during the prosecution of a given patent, col. 60, line 59 through

col. 61, line 6; see also element 4028 in drawing Figure 40; see also detailed description of the Patent Citation Module, col. 87, line 4 through col. 89, line 53, which operates to identify, for a particular patent [called a source patent], the patents in which the source patent was cited [forward citation report], col. 87, lines 11-15; see also drawing Figure 87; see also disclosure that filing date is included in the Patent Bibliographic Database, col. 18, lines 55-66; see also disclosure of extensive search and retrieval functionality and its relation to patent groups, col. 26 line 38 through col. 31, line 63; see also disclosure of the use of patent citation analysis in competitive analysis and strategic planning, col. 103, line 24 through col. 108, line 14).

35. Regarding claims 22 and 28, **Rivette et al.** additionally teaches a method and processor program further comprising based on the second set, identifying one or more co-citing patent publications, the co-citing patent publications including patent publications of the second set that are associated with one or more of filing dates later than the filing date of the starting patent publication and publication dates later than the filing date of the starting patent publication (see disclosure of the PatentRef table storing information on U.S. Patents cited during the prosecution of a given patent, col. 60, line 59 through col. 61, line 6; see also element 4028 in drawing Figure 40; see also detailed description of the Patent Citation Module, col. 87, line 4 through col. 89, line 53,

which operates to identify, for a particular patent [called a source patent], the patents in which the source patent was cited [forward citation report], col. 87, lines 11-15; see also drawing Figure 87; see also disclosure that filing date is included in the Patent Bibliographic Database, col. 18, lines 55-66; see also disclosure of extensive search and retrieval functionality and its relation to patent groups, col. 26 line 38 through col. 31, line 63; see also disclosure of the use of patent citation analysis in competitive analysis and strategic planning, col. 103, line 24 through col. 108, line 14).

36. Regarding claim 23, Rivette et al. additionally teaches a method further comprising based on the co-citing patent publications, determining a patent prosecution strategy including one or more of filing one or more claims in a pending application, filing one or more continuing applications of a parent application, declaring one or more interferences and disclosing one or more of the co-citing patent publications to a patent-granting office (see disclosure of the PatentRef table storing information on U.S. Patents cited during the prosecution of a given patent, col. 60, line 59 through col. 61, line 6; see also element 4028 in drawing Figure 40; see also detailed description of the Patent Citation Module, col. 87, line 4 through col. 89, line 53, which operates to identify, for a particular patent [called a source patent], the patents in which the source patent was cited [forward citation report], col. 87, lines 11-15; see also drawing Figure

87; see also disclosure that filing date is included in the Patent Bibliographic Database, col. 18, lines 55-66; see also disclosure of extensive search and retrieval functionality and its relation to patent groups, col. 26 line 38 through col. 31, line 63; see also disclosure of the use of patent citation analysis in competitive analysis and strategic planning, col. 103, line 24 through col. 108, line 14).

37. Regarding claims 29-40, Rivette et al. additionally teaches a method and processor program wherein said recursive searching, without user intervention, comprises using one or more queries generated by an application, generated primarily by an application, generated by an computing platform application and generated by a computer application (see Figure 86, disclosing that in step 8610, patents cited by each of the patents by reference to the PatentRef table are identified, the claimed application being anticipated by the disclosed patent citation module).

Claim Rejections - 35 USC § 103

38. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Art Unit: 2167

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

39. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

40. This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the

various claims was commonly owned at the time any inventions covered therein were

made absent any evidence to the contrary. Applicant is advised of the obligation under

37 CFR 1.56 to point out the inventor and invention dates of each claim that was not

commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

41. Claims 10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Rivette et al.** (U.S. Patent 6,339,767) as applied to claims 1-9, 11-16 and 18-40 above, and further in view of **Coleman et al.** ("Aesthetics-Based Graph Layout for Human Consumption").

42. Regarding claims 10 and 17, **Rivette et al.** teaches a method of searching a database of data elements to identify prior art publications for a starting patent publication substantially as claimed.

Rivette et al. does not explicitly teach a method further comprising determining locations at which to display the geometric shapes and lines to reduce overlaps between geometric shapes and crossings between lines.

Coleman et al., however, teaches a method further comprising determining locations at which to display the geometric shapes and lines to reduce overlaps between geometric shapes and crossings between lines (see disclosure of a number of common-sense rules for drawing aesthetically pleasing graphs, section 2.1 Layout Aesthetics, beginning on page 1417).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate rules for drawing aesthetically pleasing graphs, since this would result in a graph that maximized the measure of desirability, or aesthetic, in the resulting graph layout (see Summary, page 1415, et seq.).

Response to Arguments

43. Applicant's arguments filed 13 April 2007 have been fully considered but they are not persuasive.

44. Regarding the Applicants' argument that the submitted amendment to the specification is sufficient to assert a priority claim, the examiner respectfully disagrees.

Claims to domestic priority under 35 U.S.C. § 120 are provided for under 37 C.F.R. § 1.78. The provisions include a requirement that an application claiming such priority must contain a reference to each prior-filed copending nonprovisional application (see § 1.78(2)(i)) and that this reference must be submitted within the later of four months from the actual filing date of the later-filed application or sixteen months

from the filing date of the prior-filed application...These time periods are not extendable (see § 1.78(2)(ii)).

Since the Applicants' claim to domestic priority under 35 U.S.C. § 120 has not been timely filed, the claim is denied.

45. The Applicants may wish to file a petition to accept an unintentionally delayed claim under 35 U.S.C. § 120, 121, or 365(c) for the benefit of a prior-filed application, provisions for which can be found in 37 C.F.R. § 1.78(3).

46. Regarding the Applicants' argument that the claims are statutory under 35 U.S.C. §101, the examiner respectfully disagrees.

Initially, the examiner points out that the Ex Parte Bilski opinion (BPAI Appeal No. 2002-2257, 26 September 2006), cited by the Applicants, is not deemed relevant to the claims at issue, since the claims in Ex Parte Bilski were drawn to a method performed without any machine or apparatus, whereas the claimed invention is clearly disclosed as being carried out on a data processing system (see Figure 1A, et seq.).

Furthermore, the examiner points out that the 'technological arts' test, cited by the Applicants as being described in MPEP § 2106, is no longer a part of the 101 analysis and does not appear in the current edition of the MPEP.

The current analysis for 101 eligibility, detailed in MPEP § 2106, includes the requirement that for processes/programs carried out through the execution of software in a computer, the claims be drawn to a practical application, which can be demonstrated by either resulting in a physical transformation or producing a useful, concrete and tangible result.

For a result to be tangible, it must be more than just a thought or a computation; it must have real-world value rather than an abstract result. See *GOTTSCHALK, Comr. Pats. v. BENSON et al.* (US SupCt) 175 USPQ 673 at 676-77 (invention ineligible because it had "no substantial practical application").

As discussed above, a claim that cites only the generation or identification of a set of data does not constitute a tangible result, because until that set of data is stored, displayed, or transmitted (for example), there is no real-world value derived from the claimed invention.

The claim rejections under 35 U.S.C. § 101 are maintained.

47. Regarding the Applicants' argument that the newly added limitation that the second set is identified by recursive searching without user intervention distinguishes over the prior art of record, the examiner respectfully disagrees.

As disclosed at col. 89, lines 18-20, the operator can submit the depth of the backwards citation report desired as part of step 8606 (Figure 86), which is where the source patent is also submitted. The Applicants' claims are for a method of recursively determining data elements referenced by a starting data element/patent publication (see independent claims 1, 11 and 24). This means that at the initiation of the Applicants' claimed method/program, the starting data element/patent publication has already been specified.

The **Rivette et al.** reference discloses that the desired depth of the backwards citation report desired is submitted at the same time that the starting patent is submitted. This being the case, there is no user intervention during the generation of the backwards citation report disclosed by the **Rivette et al.** reference, and so the reference anticipates the claimed invention, including the newly cited limitation that the second set is identified by recursive searching without user intervention.

The rejections of record are maintained by the examiner.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luke S. Wassum whose telephone number is 571-272-4119. The examiner can normally be reached on Monday-Friday 8:30-5:30, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

In addition, INFORMAL or DRAFT communications may be faxed directly to the examiner at 571-273-4119. Such communications must be clearly marked as INFORMAL, DRAFT or UNOFFICIAL.

Customer Service for Tech Center 2100 can be reached during regular business hours at (571) 272-2100, or fax (571) 273-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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lsw
23 April 2007